

Ebey Island Restoration Feasibility Study
Advisory Committee Meeting #3
August 10, 2010

Submitted to:
Washington Department of Fish and Wildlife
16018 Mill Creek Boulevard
Mill Creek, WA 98012-1541

Submitted by:
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August 17, 2010

AMEC Project No. 0-915-16971-0

The following notes were recorded at the August 10, 2010, meeting of the Stakeholder Advisory Committee for the Ebey Island Restoration Feasibility Study. A list of meeting attendees and their affiliations is included. The committee met from 3 to 5:30 PM in the conference room at the Washington Department of Fish and Wildlife's (WDFW) offices in Mill Creek, Washington. Questions regarding these notes should be directed to Cleve Steward, Consultant Project Manager, tel. 206.719.1260, cleve.steward@amec.com.

Project Goal

The goal of this project is to evaluate the technical and social feasibility of restoring high quality, tidally-influenced aquatic habitat on 1,237 acres of WDFW-owned land on Ebey Island, and, in consultation with the project Advisory Committee, to select a preferred alternative that would generate the greatest biological and social benefits.

Attendees

AMEC Consultant Team:

Cleve Steward
Ryan Bartelheimer
Dan Evans (Dan Evans Consulting)
Walker Stanovsky
Cliff Strong
Matt Brennan (Philip Williams & Associates, on the phone)

WDFW:

Richard Tveten, Project Director
Doug Hennick, Fish and Wildlife Biologist
Russell Link, Program Manager
Ruth Millner, District Wildlife Biologist
Kye Iris, Property Acquisitions

Advisory Committee:

Everett Alexander, Diking District 1 Commissioner
Phil Cunningham, Diking District 1 Commissioner
Kate Halstead, Sno-Valley Tilth
Maria Calvi, Tulalip Tribes
Janne Kaje, King County Snoqualmie-Skykomish Watershed
Ryan Hembree, Snohomish County Agriculture Coordinator
Brian Bookey, Snohomish County Agriculture Advisory Board
Mike Blackbird, Pilchuck Audubon (left early)
Monte Marti, Snohomish Conservation District
Sharon Swan, Snohomish County Parks and Recreation
John Engel, Snohomish County Public Works, Surface Water Management
Andrew Corbina, WSU Snohomish County Extension
Cory Armstrong-Hoss, YMCA of Snohomish County
Mark Sadler, City of Everett
One other man who arrived late, sat in the back row, and left before we could get his name

Meeting Notes

- I. Introduction: Dan
 - A. Recap of Advisory Committee (AdCom) meeting 2
 - 1. Presented preliminary alternatives A through K
 - 2. Moved date of current meeting (AdCom 3) to allow more time for feedback
 - B. Preview of alternatives selected for further analysis
 - 1. "Near-term," blended alternative
 - a. Attempt to represent balance of various values
 - b. Best effort given current scope, budget, and timing
 - 2. "Long-term" alternative
 - a. Fish-oriented conceptual bookend to possibilities for the site
 - b. Not detailed, but provides analytical basis for further evaluation
 - C. Preview of today's agenda
 - D. Roll call: Names and affiliations of attendees. See previous page.
- II. Project overview and update
 - A. Richard
 - 1. Depth & quality of feedback after AdCom 2 is "astounding"
 - 2. AMEC is going down pathways not even on the radar a month ago
 - B. Cleve
 - 1. AMEC took comments to heart
 - a. For example, John Engel suggested goal-oriented approach
 - b. Today AMEC will rely on AdCom for analysis during the breakout session
 - 2. After AdCom 2, project team talked with grantor and then modelers (PWA)
 - a. Acceptable under grant to consider options for north end of Ebey Island
 - b. Selected alternatives reduced from intended 3 to present 2
 - c. Time / budget freed up will be applied to north end modeling and analysis
 - 3. Ryan Hembree: Is grant from RCO available to look at?
 - a. Richard: Yes, but he doesn't have it
 - i. Have to do formal public records request from WDFW
 - ii. Farm Bureau also requested it this morning
 - b. Ryan H: Would like to see Ecology grant too
 - 4. Kate: Would like to see comments submitted after AdCom 2
- III. Review of conceptual alternatives: Ryan Bartelheimer
 - A. Recap of original alternatives A through K
 - B. Brief introduction of new alternatives added after AdCom 2
 - 1. Alternative L
 - a. After AdCom 2, Ryan B met with Diking District (DD)
 - b. DD said none of alternatives A through K was acceptable
 - c. This was Ryan's attempt to incorporate their comments into an alternative
 - 2. Alternative M
 - a. This "balanced alternative" is Alternative L with additional restoration
 - b. Includes setback dike to the east of the Olympic Pipeline
 - c. Full tidal inundation of much of forested area at the southeast of the island
 - d. DD has structural concerns about any dike in interior of island
 - e. However, our geotechs say the hurdles aren't insurmountable
 - f. Would take lots of engineering and money, but no fatal flaw technically
 - 3. Alternative N
 - a. Kate suggested an option with dendritic channels between organic ag plots
 - b. Ryan attempted to combine that with DD constraints from Alternative L

- C. Recap of other comments from various AdCom members
- IV. Evaluation of Conceptual Alternatives: Cliff
 - A. Summary of meetings and coordination within AMEC team
 - B. Actions in response to comments
 - 1. Reduction of criteria to six
 - a. Some were simply eliminated as unhelpful
 - b. Most were collapsed into three main criteria
 - 2. Creation of new alternatives L, M, and N
 - 3. Reduced judgment calls in criteria, in favor of objective metrics
 - C. New criteria (see memo handed out during meeting)
 - 1. Value to fish
 - 2. Ag productivity
 - 3. Economic effects on DD
 - 4. Impacts to road system
 - 5. Impacts on utilities, including a judgment call: major vs. minor utilities
 - 6. Recreational opportunities
 - a. Least useful, because no formal opportunities exist currently
 - b. Will matter later, depending on what components we build in
 - c. Then we will be able to make measurements
 - d. Every alternative has significant opportunities
 - D. Pairwise comparison of criteria
 - 1. Rating team each scored a copy of the criteria chart independently
 - 2. Ryan H and Kate: Who was the group?
 - a. Cliff: Cliff, Cleve, Richard, Doug, Paul, Ryan, Tad, and Dan
 - b. Kate: Any 8 people would generate other ratings. It's all opinion-based.
 - c. Cleve: Yes, but biases are inevitable. Is the AdCom balanced?
 - i. Ultimately, the rating group is the selected consultant team and the client
 - ii. AdCom should comment on results, because no process will be perfect
 - iii. Also, AMEC has attempted to acknowledge the team's biases
 - d. Ryan H: Ag came out weighted just ahead of roads
 - i. But the whole point of the study is to have ag at the table
 - ii. No one on rating team was a representative of ag interests
 - iii. Has had conversations with the Forum about the project
 - iv. The chair said the point of the grant was to have ag in the conversation
 - e. Richard:
 - i. Restatement of WDFW's dual mission
 - (a) Protect fish and wildlife habitat
 - (b) Provide sustainable recreational opportunities related to those
 - ii. Terms of WDFW's purchase of the land
 - (a) Long term, must be used for fish benefits
 - (b) Short term, some usage for recreation and ag
 - (c) Though these are not the fundamental goal
 - f. Dan: Discussion of Alternative M in breakout will "truth test" the weightings
 - g. Janne:
 - i. Agrees with concerns about how AMEC arrived at weightings
 - ii. Would rather know within each criterion how detailed factors compare
 - iii. Notes that economic effects on DD has strong relationship to ag values
 - iv. Though the two aren't exactly the same
 - h. Brian: Please clarify meanings of numbers in pairwise comparison chart
 - i. And is "ag productivity" limited to project area, or basin-wide?

- ii. Cliff: Yes, just project area
 - iii. Cleve: Could have tried to look more broadly at benefits
 - (a) But didn't, as we didn't with fish
 - (b) Criteria and analysis become too fuzzy
 - iv. Brian: Ag advisory board wrote to WDFW asking to suspend this study
 - (a) Pending results of Sustainable Lands Initiative
 - (b) WDFW said no.
 - (c) Brian wants to make sure AdCom is aware of that ongoing process
 - v. Cleve: AMEC was very aware
 - (a) Hired Dan Evans because he's facilitating that process
 - (b) But also have a timeline to follow on this project
 - (c) See this as "case study" in how a single project relates to that process
 - vi. Dan: Opportunity here is technical feasibility analysis
 - (a) Will lay analytical groundwork for future process
 - (b) Any decision on this land will take years
 - (c) Later on, Sustainable Lands Strategy (SLS) will be part of guidance
 - (d) Any Ebey Island restoration will incorporate SLS in design
 - vii. Ryan H: When adopted, SLS will dictate both policy and code in County
 - viii. Cleve: Can make time for SLS presentation in later meeting, perhaps Oct.
 - ix. Brian: From beginning, this process failed to give ag due consideration
 - (a) Due to considering only this one small piece of land
 - (b) Not the broader context in the basin and county
 - x. Dan: Good discussion point later, but moving on now because of time
- V. Description of Near- & Long-Term Alternatives: Ryan B
- A. Near-Term / Alternative M
 - 1. DD concerns related to US-2 crossing
 - a. 36 (?) pilings in Ebey Slough, where WSDOT wanted none
 - b. In floods, wood and debris tends to hang up on pilings
 - c. Raises water level in slough
 - d. Could lead to overtopping & catastrophic failure of levees
 - 2. In breakout, consider wood-loading effect of putting forest at SE into estuary
 - 3. What about possibility of land acquisitions or other tweaks?
 - a. Vegetation types?
 - b. Recreational features?
 - 4. Uncertainties related to the pipeline
 - a. Alternative M assumes dike east of pipeline
 - b. But maybe owners would rather have dike on top for maintenance access?
 - B. Long-term: Full setback and tidal inundation across the island
 - C. Consider other "add-ons," especially possible cross-dikes at north end of island
 - D. Matt: Modeling considerations
 - 1. PWA will do hydraulic model and geomorphic assessment of alternatives
 - 2. Wooded area in SE
 - a. Least amount of topographic data available
 - b. LiDAR may not be very accurate because it could show treetop height
 - 3. Selected alternatives, as revised, will be put into hydraulic model
 - a. Will model flow velocities, flood behavior, duration of wet / dry periods
 - b. Considered in terms of effects on fish behavior
 - E. Ryan B: Quick comment before breakout
 - 1. Previous project with Snohomish Conservation District used heavily muted tidal
 - 2. Even that appears to have huge benefit to water quality and fish usage

- VI. Breakout Group Discussions: Dan (see breakout group notes below)
 - A. AdCom's chance to say what they liked / didn't like from foregoing presentation
 - B. As Ryan said, we need to think bigger
 - C. Can't promise comments will be built into preferred alternative
 - D. Groups are as designated on name tents
- VII. Conclusions and Next Steps: Cleve
 - A. Need to get modelers up and running
 - B. Do AdCom members feel that we're heading in the right direction?
 - 1. Kate
 - a. Breakout helped a great deal
 - b. Understands that options in October may be very different from those today
 - c. Feeling better about process than at beginning of day
 - 2. John E
 - a. Breakout was good
 - b. AMEC should "take thinking further" on ag elements
 - c. How would we enhance ag on whatever land we don't restore?
 - 3. Phil
 - a. As landowners, they are nervous
 - b. They're down there working and don't want to see their values compromised
 - c. Cleve: Is it useful to work one-on-one with AMEC / Ryan, as we have done?
 - d. Phil: Meeting today was positive
 - 4. Ryan H
 - a. As John E said, look for opportunities to add value to existing ag
 - b. If muted tidal doesn't help fish much, may not be worth it
 - c. AMEC should actively solicit input from rec interests not represented
 - d. For example, Washington Waterfowl
 - e. Ruth: Has contacts at Washington Waterfowl. Contact her for info.
 - 5. Brian
 - a. Won't get solved today, but positive view to ag would give process credibility
 - b. For example, look whether we could make the SE corner less wet
 - c. We're in this together
 - d. Also, wonders what we'd be doing in absence of existing WDFW ownerships
 - i. What would be best use for fish on the whole island?
 - ii. Might well not be the locations / ideas we're looking at
 - 6. Maria
 - a. SLS could do concurrent analysis of other Ebey areas
 - b. Our process could inform their work
 - c. Could use this as a test case in larger valley wall-to-valley wall analysis
 - 7. Janne
 - a. On both fish and ag sides, we should:
 - b. Take all of this just as sketches
 - c. Maximize productivity of selected use in each area
 - 8. John E
 - a. Articulate very clearly what we hope to get out of the modeling
 - b. Note that SnoCo has a gaging station over at DD 6 to use as a data point
 - 9. Andrew
 - a. Doesn't understand laws and regulations governing DDs
 - b. What are the implications when Everett says, "The dike won't be breached."
 - c. Cleve: Would someone be willing to present at a future meeting:
 - i. Ryan H: Not that knowledgeable about it

- ii. Everett: Would think about presenting
 - (a) DD has hired a lawyer for some advice
 - (b) The laws are pretty strong
- d. John E: State law is complex, but short answer: Everett holds all the cards
- e. Kye: Both WDFW and DD have rights to eminent domain
 - i. WDFW would never use theirs in a situation like this
 - ii. Tries to avoid getting both sides armed up for court fights

Breakout Session Notes

Group #1

- Cleve Steward, facilitator
- Matt Brennan
- Ryan Hembree
- Doug Hennick
- Mark Sadler
- Maria Calvi
- Everett Alexander
- Ruth Milner
- Andrew Corbina
- Walker Stanovsky

Notes:

- Doug: Unlikely that any alternative will be funded in near future. Want to be sure that we produce data that will help address many more alternatives in future. 20 years from now, we may be looking at a very different social situation.
- Cleve: Does long-term alternative do that?
- Doug: I think it could, if it comes up with answers to feasibility of dike changes
- Want to generate data to be able to analyze future scenarios
 - Dike length, quantities, safety, cost
 - Fish use of various resulting habitat types and locations
- Maria: So Alt C, for example, could generate info useful to similar options, even if not identical?
- Ryan H: Would be interested to see best scientific guess about benefit, best bang for buck
- Andrew: For both sides, fish and ag
- Cleve: That's what's coming up in next step. Answers will be further developed, though not fully developed.
- Ryan H: Alt M, if fully restored tidal on E, would additional channelization help?
- Doug: He would also like to know the answer: Should we be carving channels or letting them develop naturally? Especially in muted tidal.
- Effects on fish of multiple access points?
- Duration of wet/dry periods?
- Relative benefits of muted vs. full tidal? (less than in weighting system)
- Refine understanding of correlations between habitat type and fish use
- Will full tidal on E portion really work well for fish?
 - In the wooded area, would fish even be able to use it?
 - How would infiltration channels form?
 - What happens to trees, including if they die?

- Matt: LiDAR shows highest point at berm on deadwater slough. Much of wooded area likely below mean water level. Likely not to have much vegetation if restored to full tidal. But using the LiDAR is tough: Trees and even long grass can make errors of several feet, which can be the difference between vegetated area and tidal mud flat.
- Why is area uncut?
 - Lower, and therefore soupy and unfarmed?
 - Public ownership since the 1930s, when it was foreclosed on?
 - Everett: Worked on an attempt to clear it in the 1950s, but no stream channels and was low and wet; couldn't clear cost effectively.
- Perimeter along slough is higher
 - DD spent 100 years to get that dike built
 - Still has to maintain it for elevation
- Does the project team have a careful understanding of DD laws?
- Relative values of slough connection to main channel?
 - Do/can juvenile fish get back upstream on flood flow?
 - Relative values of number / size of breaches vs. which channel
- Data about fish usage of main stem vs. Ebey Slough? Maria: Lots of data collected, but not analyzed yet.
- Army Corps: Feasibility study on DD6 restoration could be useful.
 - How do hydraulics on Ebey interact with possible DD 6 restoration?
 - Mark Sadler will check on DD 6 progress / schedule
- Ag effects / improvements in drained area?
 - DD can pump it down any time, but no one wants / needs to run pumps at max capacity right now
 - How can we enhance ag? (Everett: Leave it alone and let the farmers do what they want to do.)
 - Andrew: Management practices can improve ag productivity or crop value: Reduced pesticides & fertilizers, organic ag, improved riparian buffers
- Possibility of using setback dikes for vegetative cover, especially on outboard side?
- What about no tidal in NE in exchange for full tidal in NW?
- Evaluate Alt C primarily; with view to information gathering?
 - What about with/without elevated Homeacres Road?
 - Elevation using berm or trestle?
 - Implications for modeling?
- Computing costs can be legitimate element of analysis, even if the result is that an option is totally infeasible
- Ag use at north end of island?
 - Very little on Sno County land, increasing southward
- Recreational possibilities
 - Fishing, hunting, birding, boating. Access to fields / flooded areas? Blind locations? (WDFW doesn't maintain blinds, though the Feds do.) Fishing off dikes?
 - Need to actively solicit input from rec interests who haven't been participating, like Ducks Unlimited
- Length of cross-dikes and removed sections on north end?
- BIGGEST QUESTION: What is the real benefit of muted tidal? May be limited for fish, and you still lose it totally to ag.

Group #2

- Cliff Strong, facilitator
- Kate Halstead
- Janne Kaje
- Russell Link
- Sharon Swan
- Richard Tveten

Notes:

- SnoCo owns north end of island, as well as other properties (e.g., on west side, on river just south of NW WDFW property), bought with monies that require them to be used for habitat purposes. Restoration as we're talking about it meets the intent of the property's covenants, and the County would probably be amendable to allowing WDFW do full tidal restoration on them. (Sharon)
- Primary goal should be achieving natural processes as best as possible. There is better riverine process potential on east side. West side, without direct connection to the river, provides less opportunity, especially if muted tidal. Same with central portion (via Deadwater Slough), even though channels are a good thing. (Janne)
- DD6 restoration project across slough adds more contiguous area; doing full tidal on eastern side of island would contribute to a larger area for riverine processes.
- Dendritic channels would seemingly be of more benefit than tides twice a day. But these can be designed into any project.
- Forested area will provide LWD either on-site or downstream
- Flooding spruce forest may be problematic PR-wise (public may object). However, other such forests are dying off of their own accord, so this one might be at the end of its lifecycle already.
- Chiapas-style farming/habitat channels could work w/ new types of small-scale agriculture, but not so much w/ traditional agricultural practices on the island.
- Need to include formal recreation opportunities. Need to find best location of boat launch. Work with DD1 to allow formal trails atop dikes. Should probably provide hunting opportunities.
- Group then worked on drawing up an alternative that they could all agree on. This includes (see attached map):
 - full tidal restoration on
 - the SE parcel (spruce forest area, east of Olympic pipeline)
 - NW corner down and including to SnoCo shoreline property (would mean purchasing a few parcels and old rail right-of-way), and north end (SnoCo property)
 - Managed wet/agriculture/hunting (Chiampas-style) in central parcel along Deadwater Slough with lots of channels

Group #3

- Dan Evans, Facilitator
- Ryan Bartelheimer
- Brian Bookey
- Phil Cunningham
- John Engel
- Monte Marti
- Sharon Swan?

Discussion based on Alternative M:

SE Section (aka, eastern lobe):

- DD1 concerned about soft soils for setback dike, security; generally concerned about any removal of perimeter dike
- Impact on flood storage? Currently this low-lying area absorbs some water during overtopping event (floodwater storage on *inside* of dike = “safety valve” that would buy time during overtopping event)
- What would happen to the trees?
- Habitat impacts with possible loss of wetland spruce forest?
- Setback dike might compromise pipelines (1 shallow, 1 deep)
- Fish would gain, “rare” spruce forest habitat, large mammals, eagles/birds would lose
- Farmland on northern end of SE Section would be lost if part of project; with improved drainage (open ditch rather than tiles) and/or pumping this area could be very productive

NW Corner:

- If current landowner of in-holding were amenable, the project could connect to mainstem, creating highly-valued off channel habitat, improving water quality, and reintroducing habitat forming processes
- Property owner (Alexander) and ag community would need to be made whole (and perhaps then some – make an attractive offer...)
- Full tidal inundation is much better for fish than muted and can help dampen flood flows *outside* of the dikes
- But DD1 is currently opposed to any removal of perimeter dike; DD1 is one of the few districts operating in the black
- Trying to balance options within confines of Ebey Island (or, more narrowly, WDFW ownership on Ebey) may not make sense
- Could try to make these improvements (or some of them) within larger context (“swaps,” mitigation that makes ag whole)

North Ebey:

- County owns the tip; low opportunity ag land down to middle, thus the plan would be to install cross dike and remove downstream perimeter dike (this would be supported by DD1)
- Makes sense: little loss to ag, significant benefit to fish, less perimeter dike to maintain (which DD1 appreciates)
- Report not available, but previous consultant decided north end of island was highest fish priority
- Question: what’s the relative value to fish (i.e., Chinook salmon) of improved habitat on Steamboat/Ebey Sloughs vs. mainstem?
- Juvenile fish tend to follow the bank with the best habitat and not cross channel
- Off-site mitigation to make ag whole is an important principle, DD6 offer any mitigation opportunity?

Action Items:

- From pre-meeting: Look into Olympic Pipeline replacement schedule and design
- Make Ecology and RCO grants available to AdCom
- Post comments from after AdCom 2 on project website

- Post Cliff's memo about alternatives evaluation
- Incorporate presentation on Sustainable Lands Strategy into agenda for future AdCom meeting, possibly in October
- Try to find previous consultant report on desirability of restoration at N end of island
- Coordinate with Army Corps on DD6 restoration, and if possible get info from their feasibility study. Coordinate with Mark Sadler, City of Everett
- Actively solicit feedback from rec interests. Could include contacting Ruth Milner's contact(s) at Washington Waterfowl Association. (Walker sent email to Ruth to ask, 08/11/10)